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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,253	02/06/2006	Hideyuki Takai	3273-0218PUS1	3053
2292 7590 04/30/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
MCCULLEY, MEGAN CASSANDRA				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
04/30/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/567,253

**Applicant(s)**

TAKAI ET AL.

**Examiner**

Megan McCulley

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

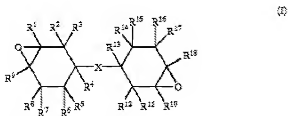
***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Takai (US 2003/0059618).

Regarding claims 1 and 8: Takai teaches a composition comprising an epoxy resin composition and a cationic polymerization initiator (paras. 35-36). The composition comprises 10-100 parts by weight of an alicyclic epoxy compound which has no ester groups (formula (I)), and 0 to 90 parts by weight of another epoxy compound. This overlaps the claimed percentages of the ester-free alicyclic epoxy compound and the other epoxy compound. Also disclosed is the cationic polymerization initiator in an amount of 0.05-5 parts by weight to 100 parts by weight of the epoxy resin (para. 86), which overlaps the claimed range (paras. 35-36). Takai further teaches a compound of a copolymer having at least one glycidyl group and/or alicyclic epoxy group in the molecule in an amount of 1-50 parts by weight to 100 parts by weight of the sum of the two epoxy compounds (para. 36). The copolymer is prepared by polymerizing epoxy-containing monomer/glycidyl acrylate monomers, which makes it an acrylic resin (para. 135). Takai further teaches the copolymer containing glycidyl acrylate monomers also contains hydroxyethyl acrylate, which would give the copolymer hydroxyl groups (para. 137). Takai also teaches the concentration of epoxy groups in the copolymer is 0.1-7.0 equivalents/kg (para. 142), which is calculated as 0.16-11.2% oxirane oxygen content.

Regarding claim 4: Takai teaches the compound:



[0036] (wherein X represents a divalent group selected from oxygen atom, sulfur atom,  $-\text{SO}-$ ,  $-\text{SO}_2-$ ,  $-\text{CH}_2-$ ,  $-\text{C}(\text{CH}_3)_2-$ ,  $-\text{CBr}_2-$ ,  $-\text{C}(\text{CBr}_3)_2-$ ,  $-\text{C}(\text{CF}_3)_2-$ ,  $-\text{C}(\text{CCl}_3)_2-$  and  $-\text{CH}(\text{C}_6\text{H}_5)-$ , or a single bond linking two alicyclic rings; and  $\text{R}^1$  to  $\text{R}^{12}$  are the same or different and each represents hydrogen atom, halogen atom, a hydrocarbon group which may contain oxygen atom or halogen atom, and an alkoxy group which may have substituent groups); 0 to 90 parts by weight of a

X can be a single bond (paras. 35-36).

Regarding claim 7: Takai teaches heat curing the composition (abstract).

### ***Response to Arguments***

Applicant's arguments filed January 29, 2009 have been fully considered but they are not persuasive.

Applicant's argument that the instant compound (D) shows unexpected results is not persuasive and not germane since a showing of unexpected results cannot be used to overcome a 102 rejection. See MPEP 2131.04.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan McCulley whose telephone number is (571)270-3292. The examiner can normally be reached on Monday - Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/  
Supervisory Patent Examiner, Art Unit 1796

/M. M./  
Examiner, Art Unit 1796